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## Conditions and Requirements of Polygraph Examination

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The establishment of the honesty or dishonesty of a person giving testimony inflicts constant dilemmas on authorities participating in criminal procedures. The concerned authorities must continuously examine the trustworthiness of the accused and the witnesses so that the court shall not have to face the possibility, before making their decision, that some of the available evidence is “poor” or “fake” (Tremmel, 2006) as the testimonies given by the accused and the witness failed to stand up to examination. It is necessary to check the credibility of testimonies not only in the judicial procedure but also during the investigation phase, according to the recommendations of criminal tactics. Thus, within the framework provided by the Act on Criminal Procedure, the authority acting in the criminal procedure may confirm whether

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the data obtained from the testimonies is true or false. In my opinion, the testimony credibility examination is a kind of search for the truth, since, for finding the truth “good” evidence is necessary while all “poor” evidence has to be filtered out at all costs. It is within this screening procedure that instrumental methods of searching for the truth may be applied. The reliability of these instrumental methods has improved considerably over the past few years, a tendency which is expected to continue in the future. In Hungary, computerized graphometric examination, layered voice analysis and thermographic cameras are also applied besides the polygraph. Beyond our borders, however, the possibilities inherent in Functional Magnetic Resonance Imaging (fMRI), or in the Monoscanner, the Future Attribute Screening Technologies (FAST), the Silent Talker, the Psychological Stress Evaluator (PSE) or the Eye Thermometer are also known, to mention but the most important techniques. Of the diverse methods that examine the changes of the unconscious reactions of the human body in my present paper I focus on the polygraph examination. In our country the polygraph is the most commonly used instrument, as it is, in fact, all around the world.

The conducting of a polygraph examination is subject to certain conditions. Besides the necessary statutory regulation, some material and personnel conditions and requirements should also be satisfied. The material side comprises the polygraph instrument itself and the examination room where the polygraph testing is conducted. The personnel requirements imply the polygraph examiner and the subject of the examination (examinee).

## 1. Material conditions

### 1.1. The polygraph

The most important material requirement is the polygraph, a multi-channel instrument that simultaneously measures diverse changes in the activities of the human body (American Polygraph Association, 2011), and records these as curves either by writing needles on a paper tape, or on the hard drive of a computer. In order that an instrument may be employed as a polygraph, it must possess a minimum of three units each measuring distinct biological parameters – a pneumograph (a unit measuring the volume changes of respiration), a sphygmograph (a unit measuring the changes of blood pressure) and a GBR (a unit measuring the electric resistance or conductivity of human skin).

Today's modern instruments are at least four-channel devices that are capable of recording four different physiological parameters:

1. changes in respiration (chest expansion and the characteristics of the flow of air at inhalation and respiration),
2. changes in respiration (abdominal expansion and the characteristics of the flow of air at inhalation and respiration),
3. changes in the electric resistance and the conductivity of human skin (by electrodes attached to the fingers or the palms),
4. changes in blood pressure (by a blood pressure cuff attached to the upper arm).

Further parameters that may also be measured:

- recording the amount of blood flowing through the respective limbs by a photo detector attached to the fingers (pletismograph),
- detection of the examinee's activity of movement by detectors attached to the legs or the cushion of the examinee's chair,
- recording the rate of spontaneous muscle tension by an electric detector attached to the arm.

## **1.2. The examination room**

The examination room, which is also a material requirement, should be located in a calm environment where the examinee is not exposed to external influences. With simple equipment and only a few pieces of furniture a low-stimulus area should be provided where nothing distracts the attention of the examinee who would thus be able to fully concentrate on the examination. It is useful to install a detective mirror in one of the walls of the room through which a member of the investigating authority or the prosecutor may monitor the examination. The presence of more than one examiner in the room would disturb the examination and the examinee would not be as open as in private with the polygraph examiner (Janniro, 1991).

## **2. Personnel conditions**

### **2.1. Mental and health requirements**

As far as the personnel side is concerned, everybody is suitable for taking the test who fulfils certain requirements (satisfactory health and physical status, etc.), and who is fully aware of the examination situation and is able to an-

swer the questions adequately. The examinee must comprehend that he must tell the truth, otherwise if he lies the polygraph will detect and reveal it. In the event of the examinee's absence of cooperation, the examination may not be conducted. Therefore, the examinee can be neither obliged nor compelled to take a polygraph test since the examinee's cooperation is necessary for obtaining a proper diagnosis. In practice, cooperation implies that the examinee follows the examiner's instructions and responds to the questions. The examination may not be conducted if the examinee suffers from some serious circulatory or respiratory disease. The examinee's mental and physical state should allow him to recognize and properly interpret the examination situation, to take the possible consequences of detection and denunciation into consideration, and to be able to produce the physiological activities that are necessary for rendering a diagnosis. Therefore, the examinee is not supposed to be too tired for the examination, nor should he be suffering from any great pain at the time of the examination.

## **2.2. The subject of polygraph examination**

In international practice, the polygraph examination may be conducted for the examination of both the defendant and the witness, whereas in Hungary this possibility has always been debated. According to certain views, only the accused may be the subject of polygraph examination. Some others claim that the witness may also be tested. There has not been a consensus, either, whether polygraph examination may or may not be conducted in the court procedure for the examination of the accused.

Before summer 2011, the Hungarian Act on Criminal Procedure (Act XIX of 1998) regulated the polygraph examination of the suspect only. Section 180 (2) states that "Without the consent of the suspect, his testimony may not be examined with the help of a polygraph". Section 182 (2) states that "It is obligatory to employ an advisor if the testimony of the defendant is examined with the help of a polygraph during the investigation". The provisions of the law suggest that the polygraph may be used for the examination of the defendant during the investigation since the law mentions the polygraph in connection with the suspect. According to another interpretation, in the absence of prohibition, the accused may also be subject to examination.

According to the Act on Criminal Procedure the suspect's testimony may not be examined by polygraph. Consequently, a further requirement of polygraph examination is that it may be conducted for the testing of a suspect

who formerly gave testimony and did not exercise his right of silence. Nevertheless, in my view, it is not justifiable to deprive the suspect of his right to propose polygraph testing. The same may be established regarding the authorities, as the omission of the examination of a suspect who exercises his right of silence but is willing to take the polygraph test would impede the investigation. During my research I have discovered a number of cases in which the suspects insisted on polygraph testing even though they refused to testify. However, when they faced the test results most of them testified, and generally confessed to having committed the particular crime.

Until summer 2011, the Act on Criminal Procedure had not regulated the polygraph examination of the witness which lead to uncertainty among law enforcers since, according to certain interpretations, the law would have explicitly prohibited polygraph examination – if that had been the legislator's intent. Since, however, the law did not contain such prohibition, I agree with the view that the witness may also be subjected to polygraph examination. Nevertheless, the Chief Prosecutor's Office, according to their position expressed twice within the past six years<sup>1</sup>, did not find the examination of the witness permissible. Yet, their position has not effectuated the omission of the polygraph examination of the witness from 2005. My research has confirmed that witness polygraph examinations are being conducted, though it always depends on the actual law enforcer whether the polygraph may be used for the examination of the witness in a given case.<sup>2</sup>

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<sup>1</sup> The NF.3797/2005/10-1. The position of the Department of Supervision of Investigation and Preparation of Accusation of the Chief Prosecutor's Office issued in July 2005 on the scope of employment of polygraph lie detection permits the employment of the polygraph in the case of an adult suspect and forbids the same in the case of witnesses and complainants. The same is expressed in the Ig. 404/2009. Legf.Ü. Reminder, Article 209/b: 'With reference to polygraph examination, Section 41 of the Act XXXIV of 1994 (Police Act) contains rules that are partially different from those contained by Section 180 (2) of the Act on Criminal Procedure. According to Section 11 (2) of the Act on Criminal Procedure, the rules of the Act on Criminal Procedure are authoritative for criminal procedures. Since the testimony of the defendant may be examined with the help of a polygraph during the investigation according to Section 180 (2) of the Act, the polygraph may be employed exclusively in the investigation phase of the procedure and for the examination of an adult defendant. The Chief Prosecutor's Office based their position on the principle that the Act on Criminal Procedure is to be applied in all criminal proceedings, and the Police Act, or Section 12 (1) of the Act XVIII of 2001 on Arrest and Seizure Warrant, that otherwise allows witness polygraph examination, cannot overwrite the regulation of the Act on Criminal Procedure that declares that solely the defendant may be the subject of polygraph examination.

<sup>2</sup> According to advisors, this primarily depends on the interpretation of law by the prosecution.

On 4 July 2011 the Parliament passed a Bill on the amendment of other laws on procedure and the administration of justice which created a new situation as the amended Act on Criminal Procedure permitted the polygraph examination of the witness<sup>3</sup> in cases of grave importance.<sup>4</sup> The law does not specify the phase in which the witness may be subjected to polygraph testing, consequently it may be used during both the investigation and the court procedure. In practice, however, there is a contradiction regarding the assignment of an advisor in the court phase for the conducting of polygraph examinations. As the law does not permit this, the general practice is the assignment of an expert. In my opinion, this practice may not be considered appropriate, since, on the basis of the legislative intent, no expert opinion may be prepared about the polygraph examination. I believe, in cases when a polygraph examination is conducted in the court phase, the assignment of an advisor should be rendered permissible, with reference to the exception to the general rule, and in both phases, following the example of the hearing of the expert, the hearing of the advisor, as an act of procedure, should be introduced – wherein the advisor shall not be heard as a witness about the result of the examination, provided that it is necessary that the advisor responds to the questions of the court orally.

I believe, the legislator, by permitting the polygraph examination explicitly in cases of grave importance, has excluded the possibility of polygraph testing in other cases. If this is the correct interpretation of the legislator's intent – what is the reason for the prohibition of polygraph examination in cases of no grave importance? Given the reliability, requirements and guarantees of the polygraph examination, I claim that such differentiation is unnecessary.

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<sup>3</sup> Section 554/E of the Act on Criminal Procedure: In cases of grave importance the witness testimony may be examined with the help of a polygraph if the witness gives consent.

<sup>4</sup> On the basis of Section 554/B of the Act on Criminal Procedure, cases of grave importance are, for instance, the Abuse of Authority (Section 225 of the Act IV of 1978 on the Criminal Code), the Establishment of a Criminal Organization (Section 263/C), all criminal acts committed in criminal organizations (Section 137, Article 8) and the graver cases of homicide (Section 166 (2a–j)). The procedural regulations concerning cases of grave importance are enclosed within the special procedures in the fifth part. The Hungarian Act on Criminal Procedure mentions among the special procedures the criminal procedure against juveniles, military justice, the procedure of private prosecution, the committal for trial, the procedure against an absent defendant, the waiver of court trial, the omission of court trial, and the procedure in the case of persons enjoying immunity. The main feature of special procedures is that this part of the law mentions only those rules that are different from the general rules.

My standpoint, which is in accordance with the official position of the Chief Prosecutor's Office, somewhat contradicts the position of the College of Criminal Affairs of the Supreme Court on Bill T/3522 on the amendment of the other laws on certain procedures and the administration of justice which states concerning the provision contained by the aforementioned Section 554/E (that has entered into force in the meantime): "The Act on Criminal Procedure currently regulates the polygraph examination of testimony in the case of the defendant and does not mention the witness. There is no prohibiting rule concerning the polygraph examination of the witness, therefore, the provision is redundant." In spite of the position of the Supreme Court, the prevailing Act on Criminal Procedure still contains the controversial section (as the controversial amendment was passed by the Parliament), which may imply that according to the legislator's intent the polygraph examination of the witness may exclusively take place under a special procedure, since the law specifies the provisions different from the general provisions among the rules of special procedures. However, the Supreme Court merely states that Section 554/E is "redundant" and not exclusive, therefore, the conclusion may also be drawn that the legislator intended to emphasize the possibility of the polygraph examination of the witness. Thus, the Supreme Court has failed to resolve the contradiction. Should the Supreme Court have defined their position earlier, they would have cut the long dispute short and would also have prevented the occurrence of different jurisdiction.

In the past few years, a number of concerns have been formulated regarding the polygraph examination of the witness. The witness, contrary to the suspect, is bound by the obligation to declare the truth and the obligation to cooperate. Therefore, if the examination of the witness is ordered, the "contradiction" arises that the authority presumes that the witness has lied, that is, the investigating authority and the prosecutor doubt the trustworthiness of the witness. This also raises the suspicion that the member of the investigating authority contemplates the possibility of the perpetration of perjury and that is the reason why the polygraph examination is ordered. In my opinion, this is an incorrect interpretation, as the witness is bound by the obligation to declare the truth and the authorities may even force the performance of this obligation by the instruments of public authority.<sup>5</sup> Consequently, the witness

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<sup>5</sup> Before mentioning the witness, the opinion of the College of Criminal Affairs of the Supreme Court deals with the consent of the defendant: 'it is not by chance that the Act on Criminal Procedure requires the consent of the defendant for the polygraph examination of the defendant [Section 180 (2)]. If the witness does not wish to cooperate with the investigating authority and already lies when the controlling questions are asked, there is no reason for the conduction of

testimony may by all means be tested by polygraph examination without even contemplating the possibility of perjury. This, however, ought to be enclosed in Section 181 on the Questioning of the Witness of the Act on Criminal Procedure *de lege ferenda*, and thus the uncertainty would at long last come to an end. The regulations concerning the obstacles to testifying as a witness must also be considered: in the event of an absolute obstacle it should be forbidden, while in the event of relative obstacles, in accordance with the prohibition of self-incrimination, it would be used strictly in the case of the voluntary commitment of the witness. If there are no obstacles to testifying, the witness may, in my opinion, be obliged to take the polygraph test without his or her consent. If the witness refuses to participate in the examination or does not cooperate during truthfulness-detection, the prosecutor (in the investigation phase) or the court (in the court procedure) may even impose a disciplinary penalty on the witness.

The question arises, however, whether the result of a polygraph examination that may be incriminating for the subject of the examination may be used for proving the commitment of perjury. I believe, the answer is yes, provided the witness did not become the accused in the main case. Naturally enough, it is always the decision of the court whether they use the result as evidence. I must emphasize, however, that the result of the polygraph examination alone is insufficient for the declaration of the defendant's guilt – the establishment of which requires further evidence.

### **2.2.1. The person suspected of the perpetration of a crime – a suspect or a witness?**

The dispute related to the polygraph examination of the witness is not new. It is rooted in the Act on Criminal Procedure that does not specify the legal status of the person suspected of the perpetration of a crime. If there is reasonable suspicion that someone has committed a crime, that person shall participate in the criminal procedure as the suspect. If, however, there is only a suspicion and there is not enough evidence to incriminate the suspected perpetrator<sup>6</sup>, the person is questioned as a witness and it is the legal status

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a polygraph examination.' Thence it follows that the College does not find the consent of the witness to the examination necessary. I myself share this view, despite the fact that according to both Hungarian and foreign practice the prior consent of the witness is required for the conduction of a polygraph examination.

<sup>6</sup> 'We would find it appropriate if there was no need for 'reasonable' suspicion for ordering the investigation and for declaring a person a suspect *de lege ferenda*. It would simplify the proce-



of the witness that determines the person's rights and obligations since the person who is merely suspected is not a real subject of the procedure. According to Erdei, Árpád, without the clarification of procedural rights the polygraph must not be used. Erdei is convinced that the polygraph examination of the witness is not permissible. The basis of his reasoning is that while in the case of the defendant the polygraph examination may well be advantageous, in the case of the witness the polygraph examination may rather lead to disadvantages.

On the contrary, Kertész, Imre claims that the polygraph examination may be applied in the case of the witness, too, if the honesty of the witness or the complainant becomes doubtful. In one of his writings Kertész states that he disagrees with the view that the suspected person may only be subjected to polygraph examination after the indictment of the defendant, and with the person's consent given without constraint. Kertész also disagrees that a person of unclear status cannot be subjected to the examination. In a constraint-free situation it is the right of any citizen to decide whether they give their consent to be subjected to the examination (Kertész, 1991).

In another of his papers Kertész writes that "in cases of voluntary consent a person should not be excluded, on the basis of the person's legal procedural status, from clarifying the person's role in the perpetration of a crime in this way (i.e. by polygraph examination) if the person wishes to do so. This requires that the concerned person may receive adequate information not only about the essence and the purpose of the examination, but also about the fact that the person may not be considered to be a suspect on the basis of the available evidence, has the right to refuse to participate in the examination and the person's doing so shall not be taken as incriminating for the person; with the person's consent, however, the person may contribute to the clarification of the circumstances of the crime, the exclusion of doubts arisen concerning the person and the termination of further examination of the person" (Kertész, 1992).

### **2.3. The polygraph examiner**

The polygraph examiner belongs to the personnel side of the polygraph examination. According to Section 182 (2) „It is obligatory to employ an advisor

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and render the defense of the concerned person more effective if it was revealed that it is being investigated whether the person has committed any criminal act, and the person would be given the possibility of defense from the moment suspicion falls on the person,' as Kertész, Imre claimed in 1992 (Kertész, 1992).

if the testimony of the defendant is examined with the help of a polygraph during the investigation". The Law has contained this provision since it came into force in 2003. This provision changed the legal regulation of the usage of polygraphs by replacing the former expert examination, conducted on the basis of the Police Act, with the procedure of the employment of an advisor who possesses special knowledge and skills, as regulated by the Act on Criminal Procedure.

According to the commentary of the law, the regulations relating to the advisor are not accidentally enclosed right after the regulations concerning the witness since the advisor, like the witness, has knowledge, expresses opinions, and gives information about the fact to be proved, that is about the given professional issue, and thus his activity bears a resemblance to witness testimony. The commentary adds that the advisor is not an expert; and basically not because of the advisor's special knowledge and skills or the depth of this knowledge but because of the advisor's legal procedural status. While the expert appears as an independent participant in the case, operating in a judicial organization separately from the authorities, the advisor provides assistance for the prosecutor and the investigating authority.

According to the explanation of the reasons presented by the Minister to the Act on Criminal Procedure, the activity of the advisor, as opposed to that of the expert, is not aimed at producing a means of evidence (expert opinion), the information given by the advisor is for informational purposes only. Therefore, as the employment of an advisor does not create a means of evidence, the prosecutor or the member of the investigating authority – provided that they are in possession of the necessary special knowledge – may generally disregard the employment of an advisor. The terminology "may generally disregard" refers to cases when the employment of an advisor is obligatory. The aforementioned conduction of polygraph examination during the investigation (Act XIX of 1998, Section 182 (2)) exemplifies such a case.

Before the prevailing Act on Criminal Procedure came into force polygraph examinations were conducted by experts, however, initially, there were cases in which criminal psychologist experts were assigned as advisors (Szíjártó, 1998). When the Act XXXIV of 1994 on the Police took effect, the expert became the exclusive polygraph examiner, who also provided an expert opinion on the result of the procedure. The Act on Criminal Procedure that entered into force in 2003 returned to the practice of the times before the Police Act,

however, obligatorily, the advisor became the polygraph examiner and the provider of an advisory opinion about the result of the examination.

In his opinion the advisor does not provide answers to the questions whether the subject of the examination committed the crime or not, whether the subject is guilty or not, neither does the advisor specify which testimony corresponds to the truth. Rather, the advisor provides an opinion about how, on the basis of the physiological changes of the subject during the testing, the honesty of the defendant may be judged<sup>7</sup>. In the advisory opinion, the following answers may appear concerning the respective questions: “the reactions of the examinee indicated deception”, “the examinee gave a misleading response”, or “on the basis of the reactions the honesty of the examinee is questionable”. The advisor may also hold that “the examinee gave honest responses”, or that “the reactions did not indicate deception”. If the advisor is unable to take a clear stand, the opinion may contain that “the truthfulness of the answer given to the question cannot be established”. In the future, the advisory statements will change since the Hungarian Institute for Forensic Sciences that coordinates polygraph examinations on a national level is aiming to standardize the possible advisory responses. Thus, the advisory opinion may state that “the response is deceptive” (the examinee has intentionally given an untruthful response; the examinee’s response is untruthful according to the examinee’s own knowledge; the examinee intends to deceive the examiner), “the response is not deceptive” (honest), or (the honesty of the response) “cannot be determined” (Hautzinger, 2004).

On the contrary, in international practice<sup>8</sup>, the advisory opinion states whether the examinee’s personality is globally “deceptive”, “not deceptive”, or, if this cannot be determined, then the examination is “unconvincing”. The advisory

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<sup>7</sup> The investigating authority generally asks the examiner whether the truthfulness of the information given by the subject of examination in connection with the criminal act is disputable or questionable (Mikolay, 2004).

<sup>8</sup> Contrary to international practice, in our country the advisor does not examine whether the person is globally deceptive, rather the advisor establishes deception on the basis of the received answers for the questions. By this practice, in foreign countries, the rare mistake may also be eliminated that an answer to a question generates such physiological reactions that further influence other answers, and thus, even if the examined person’s further answers are truthful, his or her physiological reactions may indicate continuous deception. In foreign countries, when the examined person is called deceptive the examiner is not considered to have made a mistake since the examiner’s task was not to select and mark the critical deceptive answer. In Hungary, however, such practice would be considered a serious mistake.

opinion also contains the responses given to the questions asked during the polygraph examination.<sup>9</sup>

According to the explanations of the reasons presented by the Minister to the Act on Criminal Procedure, because of the characteristics described it is necessary that the polygraph is not operated by a member of the investigating authority or the prosecutor. Rather, the examination should be conducted by a qualified person, since it is the physiological data recorded by the polygraph from which the advisor concludes the existence or the absence of the examinee's excited state induced by the questions asked during the examination, and in order to properly interpret the data and draw conclusions adequate knowledge is required. The conduction of the examination itself also requires great expertise, generally not possessed by either the prosecutor or members of the investigating authority. Considering the fact that the polygraph examination represents some kind of psychological effect on the examinee's personality, only a specialist should be permitted to conduct the examination. And this specialist is the advisor.

### **2.3.1. Who may be a polygraph examiner?**

The rules of law and the aforementioned explanations of the reasons presented by the Minister merely require that an advisor should conduct the polygraph examination, but there are no further regulations concerning the examiner. For instance, the necessary qualifications for an examiner are not specified.<sup>10</sup> Before giving the answers to these questions, I believe, it is useful to outline the required competencies of a polygraph examiner.

The polygraph examiner interprets the graphic image of the recorded physiological changes and draws conclusions regarding the trustworthiness of the

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<sup>9</sup> In the case of a defendant accused of taking the law into his own hands, the advisor asked the following critical (that is, relevant) questions: 1. Do you still owe some part of the borrowed sum to X? (Answer: 'No'). 2. Do you still owe any part of the price of the purchased items to X? (Answer: 'No'). 3. Did X make the children sit in X's car so that X can blackmail you only on one occasion?(Answer: 'No'). 4. Did you purposefully mislead the police with your testimony? (Answer: 'No'). The advisor established that in the case of the answers given to questions 1, 2, and 3, the truthfulness of the accused is questionable.

<sup>10</sup> Section 801.26 (b) of the American Employee Polygraph Protection Act of 1988 (EPPA) provides two requirements: the polygraph examiner must have a valid current license and a minimum bond of USD 50,000 that may serve as a guarantee of the fidelity of the examiner and also as a professional liability coverage.

subject of the examination directly from the intensity and formal characteristics of these changes (Krispán, 2004). The polygraph examiner must be able to create a special atmosphere for the examination that ensures that the results display the changes on the basis of which the examinee's deceptive intent, or the absence of such intent, may be diagnosed.<sup>11</sup> The advisor must ensure the cooperation of the examinee, and must direct the examinee's attention to the object of the examination all through the examination. Furthermore, the examiner must maintain a neutral and objective relationship with the examinee. The examiner's verbal manifestations, gestures and mimicking must all be kept under control and serve the purpose of maintaining the examinee's motivation to avoid detection all through the examination procedure (Krispán, 2004). The polygraph examiner must be able to interpret the examinee's meta-communication when the examinee enters the examination room, must be able to anticipate the examinee's personality features, the way the examinee should be addressed, the way the examinee's emotional manifestations should be handled, etc. If the examiner lacks this competence it will leave a mark on the entire examination and may even compromise its effectiveness.

The examiner must be in possession of the ability to ask the right questions during the polygraph examination. The examiner must not make distinctions on the basis of the examinee being male or female, rich or poor, young or old. The examiner must have a general interest in people, their conduct, behaviour and motivations. The examiner must be able to make the subject believe that it is most advantageous to tell the truth even if it leads to imprisonment. The examiner's every sentence and every movement must inspire confidence. The polygraph examiner must be an understanding, open and likable person. The examiner must have a good command of psychology, physiology, criminology and sociology, and must be able to formulate the questions so that they may be understandable for the subject. The examiner must possess at least an average – but preferably higher than average – level of intelligence (that is the reason why, in foreign countries, a university degree is a requirement), since all sorts of different people may turn up at the examinations. A further requirement for the examiner is to be well-qualified and have investigative experience. The examiner must be familiar with the mysteries of

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<sup>11</sup> The advisors interviewed during the research claim that those subjects of the polygraph examination who committed criminal acts all believed, without exception, that they are able to deceive the polygraph. However, they unanimously declared that a well-prepared polygraph examiner would be able to detect and disclose all such attempts.

investigation like, for instance, the rules of conducting a survey of the scene of a crime, of the collection and recording of evidence. If the examiner is not familiar with the basics, he shall not be able to think for the examined person (Janniro, 1991).

The examiner must be highly motivated for the work and have a personality that renders him or her an appropriate partner for the person to be examined. Therefore, the examiner must be liked by others – be they friends or colleagues. Inbau claims that a lot of polygraph examiners do not meet these requirements, and, consequently, a poorly trained examiner who does not have the required personal characteristics has a tendency to make mistakes (Inbau, 1999).

In order that a polygraph examiner may correctly interpret the result of the procedure and may truly help the work of the investigating authority, the examiner must be able to correctly interpret the information available in the given case, reconcile the needs of the investigating authority and the possibilities and the professional requirements of the examination; and realize the type of information that needs to be clarified so that he may most effectively contribute to the success of the investigation. For this the examiner needs an extensive knowledge of criminology. According to certain opinions, the role of a polygraph examiner should be filled by a criminal psychologist with experience in criminology. They claim the establishment of personal suitability for being tested by polygraph examination definitely requires a psychologist (and it is of extreme importance in the case of criminals among whom abnormal personality structure is fairly frequent) (Brósz, Horváth, 1992). Others, however, believe that it is easier to retrain a detective than train a psychologist to be a polygraph examiner, since the special psychological knowledge an advisor must possess for the conduction of an examination is very little, and it is not psychotherapy but his knowledge of criminology which the examiner must utilize at the question planning stage, and during the examination.

In accordance with the opinion of polygraph examiners, I also believe that a degree in psychology should not be a requirement. However, a university degree that implies knowledge of criminology (earned primarily at the Faculty of Law Enforcement of the National University of Public Service – FLE NUPS, or at one of the Faculties of Law) should definitely be a requirement. Additionally, legislation should provide that the candidate must complete a course organized by the Department of Polygraph Examination of the Hungarian Institute for Forensic Sciences – HIFS (hereinafter HIFS; in Hungar-

ian BSZKI). This would be especially necessary since polygraph examiners have only trained one another in recent years. The standardized course would ensure that polygraph examiners conduct examinations at a similar level nationwide, and thus the subjects of the examination will not expect that certain advisors will not question the honesty of their answers and will not establish the involvement of the accused in the investigated case. A well-prepared and experienced polygraph examiner is able to detect if the subject of the examination intends to manipulate the examination result in various ways. The standardized course and the continuous professional control would guarantee that only those advisors who are able to detect attempts at deception and manipulation may conduct examinations. In addition to preparatory courses for the polygraph examination, compulsory training courses should also be organized by the HIFS for ensuring and maintaining the professional level of examinations.

In foreign practice, the majority of polygraph examiners employed in law enforcement possess both qualifications and experience in the field of criminal investigation. Generally, a college or university degree is a requirement, while no specialization is required (Krispán, 2004). Inbau claims that a polygraph examiner should not necessarily be a medical doctor or a psychologist, however, due to the requirement of a higher-than-average level of intelligence for the examinations renders it necessary that the examiner has a university degree (Inbau, 1999). For the appropriate conducting of examinations, and also for the maintenance of an appropriate level of skill, constant practice is required. Therefore, in those countries where polygraph examinations are extensively utilized, a minimum number of obligatory examinations per year has been established for the examiners and failure to pass these exams results in the examiner losing his license (Krispán, 2004).

Inbau claims, that even though a few weeks of intensive training would be sufficient for the acquisition of the knowledge necessary to operate a polygraph, ideally, the candidate should complete at least a six-month-long course. This course would provide physiological and psychological knowledge and the candidate would attend and monitor a number of examinations. It is also necessary for the candidates to perform their own experiments, conduct their own examinations under the supervision of their instructor, and study and evaluate the polygraph examinations of several such cases in which the final decisions have already been reached. The course should also provide practical guidelines that are based on impressions and personal experiences. Participants of the course should become familiar with such psychological

and tactical methods that will enable him to provide the authorities with testimony or important data in future cases when the subject of the examination proves to be dishonest. It is also a requirement that an instructor supervises no more than six candidates, in order to ensure the effectiveness of the course.

Inbau finds it necessary for the polygraph examiner to focus solely on polygraph examinations, and not to be employed as an expert in any other field. He claims that the police are making a mistake when they fail to comply with this rule. At the beginning of their career, polygraph examiners, similarly to lawyers, should consider the polygraph as their “jealous wife” (Inbau, 1999).

### **2.3.2. Quality Polygraph Examination**

The polygraph examiner, the examiner’s preparedness and the applied instrument together determine the quality of the examination. The quality related to the examiner may be maintained and improved by compulsory training, on the one hand, and by continuous quality control, on the other hand. In cases when quality control reveals that the examination conducted by the examiner does not meet professional requirements, the HIFS shall point out the error. If they identify new errors later, the polygraph examiner must be monitored by an experienced HIFS-advisor for some months so that the examinations conducted by this examiner cease to be unprofessional. As soon as the necessary ability is acquired, the examiner may again conduct examinations independently.

Continuous control has been exercised since spring 2011, when the Department of Polygraph Examination was established at the HIFS. In our country, the institution of quality control is not new, it was already a general practice at the time of centralized polygraph examinations. In later years, however, quality control has been exercised insofar as examinations are repeated with the participation of another polygraph advisor or expert. The advantage of the present system is that the polygraph examiner immediately forwards the data of the examination by e-mail to the central HIFS-server. Thus, there is no lengthy waiting period for examination results, nor does compliance with the chain of command take time. Nevertheless, this method is not suitable for making it obvious from the data of the findings why the examined person’s physiological reactions changed. Was it only a reaction to the question asked, or to the examiner’s intonation or glance, etc. If, for instance, a mobile phone starts ringing when a question is asked the examiner must make a note of it



in the recordings, but if no such palpable event occurs during the examination the HIFS-supervisor may not know the answer either and may only criticize the questionnaire or the non-recognition of clear physiological changes. The examination may be made more efficient by installing a web-camera to the advisor's laptop which would record, in addition to voice-recording, both the examiner's and the examinee's behaviour, expressions and look. The newest HIFS instruments have built-in web-cameras, however, due to the size of the image recording file it may not be forwarded to the server of the HIFS so this means of control is, in fact, still unavailable. The situation is expected to change, but the exact date of the change is not yet known. If the polygraph examiner received information about the outcome of the case it would serve as a kind of feedback and would also help improve the quality of examinations. Such feedback would reveal whether the polygraph oriented the investigation adequately, whether the examination was followed by a confession, whether the requested material means of evidence was found, and whether the court considered the advisory opinion about the subject's involvement in the crime, etc. According to Lykken, the polygraph examiner, contrary to an engineer, for instance, is unable to recognize and face mistakes made during the examination since the examiner does not receive any information about the case following the examination (Lykken, 1987). This causes problems not only in Hungary but also abroad, therefore, the situation should be changed. However, considering the fact that, after the filing of an accusation, the member of the investigating authority is not informed either about the future of the case he investigated or examined – realistically, it will take a fairly long time before we may welcome any change.

### 3. Final thoughts

A good quality polygraph, a stimulation-free examination room, a well-prepared and experienced polygraph examiner, and a subject who is suitable for the examination are all prerequisites of a successful polygraph examination. In our country, the requirements are fulfilled as far as the material side is concerned, however, as far as the personnel side is concerned, certain changes are necessary.

Proposals for changes concerning the subject of the examination:

1. In accordance with international practice, the conducting of a polygraph examination of the witness should be permitted in our country, too – and not only in cases of grave importance. Since it is the Act on Criminal Pro-

cedure that contains provisions as to the polygraph examination of the suspect in Hungary, the possibility of the polygraph examination of the witness should be enclosed in Section 181 about the questioning of the witness *de lege ferenda*. The rules relevant to the obstacles to witness testimony should also be taken into consideration: in the event of an absolute obstacle, the polygraph should not be applied at all, whereas in the event of relative obstacles, in accordance with the prohibition of self-incrimination, it could only be used in the event of the voluntary commitment of the witness. Where there is no witness testimony obstacle, the imposition of a disciplinary penalty should be made possible if the witness does not submit to a polygraph examination or does not cooperate with the examiner during the polygraph examination.

2. Due to the inaccurate regulations of the Act on Criminal Procedure, law enforcers are divided on the question whether polygraphs may be used during court procedure. In my opinion, the law should provide the possibility for the use of a polygraph in the court phase.<sup>12</sup>

I believe that the implementation of the proposals concerning the subject of the examination would render jurisprudence more uniform and would terminate the years-long disputes about statutory interpretations.

Proposals for changes concerning the polygraph examiner:

1. The current Act on Criminal Procedure states that polygraph examinations must be conducted by an advisor. In my opinion, it is unnecessary to change this provision, and there is no reason to require an expert opinion about the outcome of the procedure. However, similarly to the former Act on Criminal Procedure (Act I of 1973) the employment of an advisor solely for the event of polygraph examination should be made possible again.
2. The Act on Criminal Procedure should contain a provision that at the court procedure the polygraph examination of the testimony of both the accused and the witness is conducted by the advisor.
3. The procedure of “hearing the advisor”, the events and content of which shall be recorded in the minutes, should be introduced in the Act on Criminal Procedure. At the hearing, both the defendant and the counsel for the defense should be able to question the advisor, and if a witness was also examined then the witness, too, could ask questions of the advisor.

<sup>12</sup> At the end of Section 288 (Chapter XIII, Title I of the Act on Criminal Procedure) regulating the questioning of the accused the following addition may be placed (in a new paragraph): ‘the testimony of the accused may not be examined by polygraph without the consent of the accused’. The same provision may be implemented concerning the witness, following Section 294, with the difference that the consent of the witness shall not be required.

4. The advisor conducting the polygraph examination should be required to complete a HIFS-course and also to possess a college or university degree that implies the acquisition of knowledge in the field of criminology.
5. Continuous training as well as official (HIFS) control should be ensured for the advisors.

The standardization of qualifications for polygraph examiners, the obligation to complete a special course, and participation in continuous training would facilitate that only advisors who possess the adequate skills and knowledge would conduct examinations. This is necessary, since, the personnel and material sides compared, the advisor is obviously one of the most important factors of the examination. However modern the polygraph instrument may be, if the examiner is not sufficiently prepared the results of the examination may not be utilized for the assessment of the credibility of the testimony.

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